

2003-08-18 2750-1573P.ST25.txt
SEQUENCE LISTING

<110> FELDMAN et al.

<120> NUCLEOTIDE SEQUENCES AND POLYPEPTIDES ENCODED THEREBY USEFUL FOR
INCREASING PLANT SIZE AND INCREASING THE NUMBER AND SIZE OF LEAVES

<130> 2750-1573F(PCT)

<140> UNASSIGNED

<141> 2003-08-18

<160> 47

<170> PatentIn version 3.0

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<213> Zea mays subsp. mays

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	gtctctgtatc	aaaattttgc	tgacgacgag	gctgaagctg	aaacagaatc	aatgaaagca	540
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<211> 192
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<213> Zea mays subsp. mays

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 20 25 30
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 35 40 45
 Ser Phe Val Asp Gln Leu Tyr Asn His Gly Ser Arg Pro Arg Asn Ala
 50 55 60
 Asn Gly Thr Ala Phe Lys Ala Leu Arg Arg Glu Tyr Val Glu Tyr Glu
 65 70 75 80
 Lys Thr Asp Ala Pro Val Arg Arg Gly Ala Lys Cys Cys Gly Val Pro
 85 90 95
 Ala Asn Pro Trp Met Gln His Phe Arg Pro Arg Ser Asp Gly Gly Asn
 100 105 110
 Asn Ala Arg Gly Asp Gly Leu Gly Asp Ser Val Gly Asp Leu Glu Ser
 115 120 125
 Gly Thr Glu Ala Asn Arg Lys Ser Leu Ser Ala Ser His Gly Arg Glu
 130 135 140
 Arg Asp Ala Cys Glu Gly Glu Pro Gln Leu Leu His Glu Ser Arg Glu
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 165 170 175
 Ser Met Lys Ala Tyr Lys Lys Arg Arg Leu Ser Arg Thr Met Ile Asn
 180 185 190

<210> 4
 <211> 489
 <212> DNA
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 aaggctctcc gcagggagta cgtcgagtat gagaagaccg atgctcctgt gcgaaggggg 180
 gcttaagtgct gcggcggttcc tgcaaattcct tggatgcagc atttcaggcc acgttgtat 240
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ggcggtataa acgcgcgagg cgatgggctc gggattctg tggcgatct tgaatctggc	300
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<212> PRT
<213> Zea mays subsp. mays

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Arg Asn Ala Asn Gly Thr Ala Phe Lys Ala Leu Arg Arg Glu Tyr Val			
35	40	45	
Glu Tyr Glu Lys Thr Asp Ala Pro Val Arg Arg Gly Ala Lys Cys Cys			
50	55	60	
Gly Val Pro Ala Asn Pro Trp Met Gln His Phe Arg Pro Arg Ser Asp			
65	70	75	80
Gly Gly Asn Asn Ala Arg Gly Asp Gly Leu Gly Asp Ser Val Gly Asp			
85	90	95	
Leu Glu Ser Gly Thr Glu Ala Asn Arg Lys Ser Leu Ser Ala Ser His			
100	105	110	
Gly Arg Glu Arg Asp Ala Cys Glu Gly Glu Pro Gln Leu Leu His Glu			
115	120	125	
Ser Arg Glu Val Ser Asp Gln Asn Phe Ala Asp Asp Glu Ala Glu Ala			
130	135	140	
Glu Thr Glu Ser Met Lys Ala Tyr Lys Lys Arg Arg Leu Ser Arg Thr			
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Met Ile Asn			

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<211> 441
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<213> Zea mays subsp. mays

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<213> Zea mays subsp. mays

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20 25 30
Glu Tyr Glu Lys Thr Asp Ala Pro Val Arg Arg Gly Ala Lys Cys Cys
35 40 45
Gly Val Pro Ala Asn Pro Trp Met Gln His Phe Arg Pro Arg Ser Asp
50 55 60
Gly Gly Asn Asn Ala Arg Gly Asp Gly Leu Gly Asp Ser Val Gly Asp
65 70 75 80
Leu Glu Ser Gly Thr Glu Ala Asn Arg Lys Ser Leu Ser Ala Ser His
85 90 95
Gly Arg Glu Arg Asp Ala Cys Glu Gly Glu Pro Gln Leu Leu His Glu
100 105 110
Ser Arg Glu Val Ser Asp Gln Asn Phe Ala Asp Asp Glu Ala Glu Ala
115 120 125

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Glu Thr Glu Ser Met Lys Ala Tyr Lys Lys Arg Arg Leu Ser Arg Thr
 130 135 140

Met Ile Asn
 145

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 <211> 1494
 <212> DNA
 <213> Zea mays subsp. mays

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agggggcttg cttcatctgc tgtccgatcg tggtttggtt tctcggggct ggcgcggta	180
agagcgcacc tgaattccac cgaaatccgc cacggtagtt cttgcctagg tgtgtcggtt	240
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gttagtctcc cccccaatcc gtaatcatcc ggcgtctagg aaactgcagt ccagtttct	360
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gacgcggtcg aggcctcagt gggcgaccat gagtcgggta ctcaggcaag ccgcaagagc	960
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2003-08-18 2750-1573P.ST25.txt
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<212> PRT
<213> Zea mays subsp. mays

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 20 25 30

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Trp Thr Asp Glu Arg His Met Leu Tyr Ile Ser Ser Met Glu Ala Ser
 35 40 45

Phe Val Asp Gln Leu Tyr Asn His Gly Asn His Pro His Asp Ala Asn
 50 55 60

Gly Ala Gly Phe Lys Val Leu Arg Arg Gly Val Trp Glu Tyr Ile Glu
 65 70 75 80

Tyr Glu Lys Thr Ser Ala Pro Val Arg Ser Gly Ala Lys Cys Cys Val
 85 90 95

Pro Ala Asn Pro Trp Ile Arg His Phe Arg Pro Arg Asp Cys Gly Ser
 100 105 110

Asn Ala Gln Ser Asp Ala Val Glu Ala Ser Val Gly Asp His Glu Ser
 115 120 125

Gly Thr Gln Ala Ser Arg Lys Ser Pro Ser Val Ser His Gly Arg Glu
 130 135 140

Arg Gly Ala Cys Lys Gly Glu Pro Gln Ile Leu His Glu Ser Thr Glu
 145 150 155 160

Val Ser Asp Gln Asn Phe Ala Asp Asp Glu Ala Glu Ala Glu Thr Glu
 165 170 175

Ser Met Lys Ala Cys Lys Lys Arg Arg Leu Ser Arg Ala Leu His Ser
 180 185 190

Gly Ala Glu
 195

<210> 11
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<213> Zea mays subsp. mays

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aaggttctcc gcaggggggt gtgggagtac atcgagtatg agaagaccag tgcccctgtg		180
cgaagtgggg ctaaatgctg cgtccctgca aatccttgaa tccggcattt caggccacgt		240
gactgcggt ataacgcaca gagtgacgcg gtcgaggcct cagtggcga ccatgagtgc		300
ggtactcagg caagccgcaa gagcccttca gtgtctatg gaagggaaac gggagcttgt		360
aagggagaac cccagattct acatgaaagt acagaggtct ctgatcaaaa ttttgctgac		420
gatgaggctg aagctgaaac agaatcaatg aaagcatgca agaaaaggag actaaggcagg		480
gctttgact ccgggtctga a		501

<210> 12
<211> 167

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<212> PRt
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 20 25 30
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 35 40 45
 Glu Tyr Ile Glu Tyr Glu Lys Thr Ser Ala Pro Val Arg Ser Gly Ala
 50 55 60
 Lys Cys Cys Val Pro Ala Asn Pro Trp Ile Arg His Phe Arg Pro Arg
 65 70 75 80
 Asp Cys Gly Ser Asn Ala Gln Ser Asp Ala Val Glu Ala Ser Val Gly
 85 90 95
 Asp His Glu Ser Gly Thr Gln Ala Ser Arg Lys Ser Pro Ser Val Ser
 100 105 110
 His Gly Arg Glu Arg Gly Ala Cys Lys Gly Glu Pro Gln Ile Leu His
 115 120 125
 Glu Ser Thr Glu Val Ser Asp Gln Asn Phe Ala Asp Asp Glu Ala Glu
 130 135 140
 Ala Glu Thr Glu Ser Met Lys Ala Cys Lys Lys Arg Arg Leu Ser Arg
 145 150 155 160
 Ala Leu His Ser Gly Ala Glu
 165

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 atcgagtagt agaagaccag tgccccctgtg cgaagtgggg ctaaatgctg cgtccctgca 180
 aatccttggta tccggcattt caggccacgt gactgcggta gtaacgcaca gagtgacgcg 240
 gtcgaggcct cagtgggcga ccatgagtcg ggtactcagg caagccgcaa gagcccttca 300
 9

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acagaggTCT ctgatcaaaa ttttGCTGAC gatGAGGCTG aagCTGAAAC agaatCAATG 420
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20 25 30

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35 40 45

Pro Val Arg Ser Gly Ala Lys Cys Cys Val Pro Ala Asn Pro Trp Ile
50 55 60

Arg His Phe Arg Pro Arg Asp Cys Gly Ser Asn Ala Gln Ser Asp Ala
65 70 75 . 80

Val Glu Ala Ser Val Gly Asp His Glu Ser Gly Thr Gln Ala Ser Arg
85 90 95

Lys Ser Pro Ser Val Ser His Gly Arg Glu Arg Gly Ala Cys Lys Gly
100 105 110

Glu Pro Gln Ile Leu His Glu Ser Thr Glu Val Ser Asp Gln Asn Phe
115 120 125

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2003-08-18 2750-1573P.ST25.txt

<223> ceres Seq. ID no. 4788142

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aagctccgac gattcttctt ctgttagggga agagacgact tcttcaatgt attctgcgag	180
gaatgaagat acgcctacag aatggaccga tgagaagcat agtttgtatc ttaaatcaat	240
ggaagcttcc ttcgttgatc agctgtacaa ctccctcggt gcgcgtcgct ccaaaaacaa	300
caaggatact gtcggaccat cgagaaggtt cggtgatggt ggaaaacctt ctgaagaaca	360
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<211> 276
<212> DNA
<213> Brassica napus

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gatgagaagc atagtttcta tcttaaatca atggaagctt cttcgttga tcagctgtac	180
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<212> PRt
<213> Brassica napus

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20	25
30	

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Glu	Asp	Thr	Pro	Thr	Glu	Trp	Thr	Asp	Glu	Lys	His	Ser	Leu	Tyr	Leu
35					40						45				

Lys	Ser	Met	Glu	Ala	Ser	Phe	Val	Asp	Gln	Leu	Tyr	Asn	Ser	Leu	Gly
50					55					60					

Ala	Leu	Gly	Ser	Lys	Asn	Asn	Lys	Asp	Thr	Val	Gly	Pro	Ser	Arg	Arg
65				70					75				80		

Phe	Gly	Asp	Gly	Gly	Lys	Pro	Ser	Glu	Glu	Gln	Val				
					85				90						

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<213> Brassica napus

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<213> Brassica napus

<220>
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Met Tyr Ser Ala Arg Asn Glu Asp Thr Pro Thr Glu Trp Thr Asp Glu
1 5 10 15

Lys His Ser Leu Tyr Leu Lys Ser Met Glu Ala Ser Phe Val Asp Gln
20 25 30

Leu Tyr Asn Ser Leu Gly Ala Leu Gly Ser Lys Asn Asn Lys Asp Thr
35 40 45

Val Gly Pro Ser Arg Arg Phe Gly Asp Gly Gly Lys Pro Ser Glu Glu
50 55 60

Gln Val
65

<210> 20

2003-08-18 2750-1573P.ST25.txt

<211> 186

<212> DNA

<213> Brassica napus

<400> 20

atgaagatac gcctacagaa tggaccgatg agaaggcatag tttgtatctt aaatcaatgg	60
aagcttcctt cgttgatcag ctgtacaact ccctcgggtgc gctcggtcc aaaaacaaca	120
aggatactgt cggaccatcg agaagggttcg gtgatggtgg aaaaccttct gaagaacagg	180
tatgaa	186

<210> 21

<211> 62

<212> PRT

<213> Brassica napus

<220>

<221> peptide

<222> (1)..(62)

<223> ceres Seq. ID no. 4788145

<220>

<221> misc_feature

<222> ()..()

<223> xaa is any aa, unknown or other

<400> 21

Met Lys Ile Arg Leu Gln Asn Gly Pro Met Arg Ser Ile Val Cys Ile			
1	5	10	15

Leu Asn Gln Trp Lys Leu Pro Ser Leu Ile Ser Cys Thr Thr Pro Ser		
20	25	30

Val Arg Ser Ala Pro Lys Thr Thr Arg Ile Leu Ser Asp His Arg Glu		
35	40	45

Gly Ser Val Met Val Glu Asn Leu Leu Lys Asn Arg Tyr Glu		
50	55	60

<210> 22

<211> 486

<212> DNA

<213> Brassica napus

<220>

<221> misc_feature

<222> (1)..(486)

<223> ceres Seq. ID no. 4796909

<220>

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<222> ()..()

<223> n is a, c, t, g, unknown, or other

<400> 22

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ctctctagtc ttaacaagat agataggtag caaatggtagt gtgactacag agagaactat	120
--------------------------------------------------------------------	-----

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agcccaagct ccgacgattc ttcttctgta	gggaaagaga cgacttcttc aatgtattct	180
gcgaggaatg aagatacgcc tacagaatgg accgatgaga agcatagttt gtatctaaa		240
tcaatggaag cttccttcgt tgatcagctg tacaactccc tcggtgcgct cggctccaaa		300
aacaacaagg atactgtcgg accatcgaga aggttcggtg atggtggaaa acttctgaa		360
gaacagaaga tgaatgtgag gcagcctgag tatcgtctca atggaagaca cggtcgtcgc		420
tctcacgagt ttcttaggag tccatggatc aagcactata agcttcacc aaagtcccta		480
acagat		486

<210> 23
<211> 393
<212> DNA
<213> Brassica napus

<400> 23	atggttggtg actacagaga gaactatagc ccaagctccg acgattcttc ttctgttaggg	60
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gatgagaagc atagttgtta tcttaaatca atggaagctt cttcggttga tcagctgtac		180
aactccctcg gtgcgctcgg ctccaaaaac aacaaggata ctgtcggacc atcgagaagg		240
ttcggtgatg gtggaaaacc ttctgaagaa cagaagatga atgtgaggca gcctgagtat		300
cgtctcaatg gaagacacgg tcgtcgctct cacgagtttc ttaggagtcc atggatcaag		360
cactataagc cttcaccaaa gtccttaaca gat		393

<210> 24
<211> 131
<212> PRt
<213> Brassica napus

<220>
<221> peptide
<222> (1)..(131)
<223> ceres Seq. ID no. 4796910

<220>
<221> misc_feature
<222> ()..()
<223> xaa is any aa, unknown or other

<400> 24	Met Val Gly Asp Tyr Arg Glu Asn Tyr Ser Pro Ser Ser Asp Asp Ser		
1	5	10	15
Ser Ser Val Gly Glu Glu Thr Thr Ser Ser Met Tyr Ser Ala Arg Asn			
20	25	30	
Glu Asp Thr Pro Thr Glu Trp Thr Asp Glu Lys His Ser Leu Tyr Leu			
35	40	45	

2003-08-18 2750-1573P.ST25.txt

Lys Ser Met Glu Ala Ser Phe Val Asp Gln Leu Tyr Asn Ser Leu Gly
 50 55 60

Ala Leu Gly Ser Lys Asn Asn Lys Asp Thr Val Gly Pro Ser Arg Arg
 65 70 75 80

Phe Gly Asp Gly Gly Lys Pro Ser Glu Glu Gln Lys Met Asn Val Arg
 85 90 95

Gln Pro Glu Tyr Arg Leu Asn Gly Arg His Gly Arg Arg Ser His Glu
 100 105 110

Phe Leu Arg Ser Pro Trp Ile Lys His Tyr Lys Pro Ser Pro Lys Ser
 115 120 125

Leu Thr Asp
 130

<210> 25
 <211> 315
 <212> DNA
 <213> Brassica napus

<400> 25
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 tatcttaaat caatggaaagc ttcccttcgtt gatcagctgt acaactccct cggtgcgctc
 120
 ggctccaaaa acaacaagga tactgtcgga ccatcgagaa ggttcggtga tggtgaaaa
 180
 ccttctgaag aacagaagat gaatgtgagg cagcctgagt atcgtctcaa tggaaagacac
 240
 ggtcgtcgct ctcacgagtt tcttaggagt ccatggatca agcactataa gccttcacca
 300
 aagtccctaa cagat
 315

<210> 26
 <211> 105
 <212> PRt
 <213> Brassica napus

<220>
 <221> peptide
 <222> (1)..(105)
 <223> ceres Seq. ID no. 4796911

<220>
 <221> misc_feature
 <222> ()..()
 <223> xaa is any aa, unknown or other

<400> 26
 Met Tyr Ser Ala Arg Asn Glu Asp Thr Pro Thr Glu Trp Thr Asp Glu
 1 5 10 15
 Lys His Ser Leu Tyr Leu Lys Ser Met Glu Ala Ser Phe Val Asp Gln
 20 25 30
 Leu Tyr Asn Ser Leu Gly Ala Leu Gly Ser Lys Asn Asn Lys Asp Thr
 35 40 45

2003-08-18 2750-1573P.ST25.txt

val	Gly	Pro	Ser	Arg	Arg	Phe	Gly	Asp	Gly	Gly	Lys	Pro	Ser	Glu	Glu
50						55					60				
Gln	Lys	Met	Asn	Val	Arg	Gln	Pro	Glu	Tyr	Arg	Leu	Asn	Gly	Arg	His
65				70				75					80		
Gly	Arg	Arg	Ser	His	Glu	Phe	Leu	Arg	Ser	Pro	Trp	Ile	Lys	His	Tyr
				85				90					95		
Lys	Pro	Ser	Pro	Lys	Ser	Leu	Thr	Asp							
				100				105							

<210> 27
<211> 243
<212> DNA
<213> Brassica napus

<400> 27
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aacaaggata ctgtcggacc atcgagaagg ttccggatgt gtggaaaacc ttctgaagaa 120
cagaagatga atgtgaggca gcctgagttat cgtctcaatg gaagacacgg tcgtcgctct 180
cacgagtttc ttaggagtcc atggatcaag cactataagc cttcaccaaa gtccctaaca 240
gat 243

<210> 28
<211> 81
<212> PRt
<213> Brassica napus

<220>
<221> peptide
<222> (1)..(81)
<223> ceres Seq. ID no. 4796912

<220>
<221> misc_feature
<222> ()..()
<223> xaa is any aa, unknown or other

<400> 28
Met Glu Ala Ser Phe Val Asp Gln Leu Tyr Asn Ser Leu Gly Ala Leu
1 5 10 15

Gly Ser Lys Asn Asn Lys Asp Thr Val Gly Pro Ser Arg Arg Phe Gly
20 25 30

Asp Gly Gly Lys Pro Ser Glu Glu Gln Lys Met Asn Val Arg Gln Pro
35 40 45

Glu Tyr Arg Leu Asn Gly Arg His Gly Arg Arg Ser His Glu Phe Leu
50 55 60

Arg Ser Pro Trp Ile Lys His Tyr Lys Pro Ser Pro Lys Ser Leu Thr
65 70 75 80

2003-08-18 2750-1573P.ST25.txt

Asp

<210> 29
<211> 1014
<212> DNA
<213> *Arabidopsis thaliana*,

<220>
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<222> (1)..(1014)
<223> *ceres* Seq. ID no. 12321174

<220>
<221> misc_feature
<222> ()..()
<223> n is a, c, t, g, unknown, or other

<400> 29
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agagagacga cggagttctt ttctaaagca ccggagagga ggagaagcaa cgatggagaa 120
tgattgcacg gtgaatatttgc tctctctggaa gaaggatcgc gatgtttcg aggccgtcggc 180
tgaatctcag agcgagtcga ctcttcgaa ctcgctcgat tccgggttta cggctgagac 240
ctctcggttct gatgctgatt ccaaactggaa tgaatgtact gcttggacga atgagaaaca 300
caactcatat cttgattttt tagagagctc gtttggtagg caattatact ctttgcttgg 360
aggtggact cagagacttt ctagaactcg tgatgtgcag tctaactctc ataaatcagc 420
tgatcagttt accgtcctac aaaatggttt ctggcagaag gttaactttt gaaagaaaca 480
atcttgggg gagacttcat ctgagtttgc tttcacaga aattcatttga gaaataagcc 540
tgaaaattcc aacggaaatt acaccatggg aactactgtc caaggagatg tgttatgtca 600
tgacgaaacc aaacactcag aggcgtcagg gcagaatttc agagaagaag aagaagaaga 660
agagaaggaa gaggtgagca aaaaacgaga aagagaagca aataacgtatg atagttcatt 720
gaaggaggat caggttgtc cgtaaggat ggtgaagccc agaacgtgaa agcatttagga 780
agtgtatgtt aaatactatg aatagagata aagaataga agaagggttg gttacgtatg 840
tggagagggt tttgtttgtt gtatagcgtg aggctaaaga gagccttcct tataaaggaa 900
tccaatggaa tatggaaata ggattgggtt ttgtttcgt taaattttgt ctaatgttaa 960
ctagggaaa agttatctga tagtatttagc atcttatggc aattttatttc tttt 1014

<210> 30
<211> 654
<212> DNA
<213> *Arabidopsis thaliana*

<400> 30
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17

2003-08-18 2750-1573P.ST25.txt

gcgtcggctg aatctcagag cgagtcgact ctttcgaact cgctcgattc cggtgttacg	120
gctgagacct ctcgttctga tgctgattcc aaactggatg aatgtactgc ttggacgaat	180
gagaaaacaca actcatatct tgattattta gagagctcgt ttgttaggca attatactcc	240
ttgcttgag gtgggactca gagactttct agaactcgtg atgtgcagtc taactctcat	300
aaatcagctg atcagttac cgtcctacaa aatggttgct ggcagaaggtaaactttgga	360
aagaaaacaat cttgtttgga gacttcatct gagttcgtt ttcacagaaaa ttcattgaga	420
aataagcctg aaaattccaa cgaaaattac accatggaa ctactgtcca aggagatgtg	480
ttatgtcatg acgaaaaccaa acactcagag gcgtcaggc agaatttcag agaagaagaa	540
gaagaagaag agaagggaga ggtgagcaaa aaacgagaaaa gagaagcaaa taacgatgat	600
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<210> 31
<211> 218
<212> PRT
<213> *Arabidopsis thaliana*

<220>
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<222> (1)..(218)
<223> *ceres* Seq. ID no. 12321175

<220>
<221> misc_feature
<222> ()..()
<223> xaa is any aa, unknown or other

<400> 31
Met Glu Asn Asp Cys Thr Val Asn Ile Val Ser Leu Glu Lys Asp Arg
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Asp Val Ser Glu Ala Ser Ala Glu Ser Gln Ser Glu Ser Thr Leu Ser
20 25 30

Asn Ser Leu Asp Ser Gly Val Thr Ala Glu Thr Ser Arg Ser Asp Ala
35 40 45

Asp Ser Lys Leu Asp Glu Cys Thr Ala Trp Thr Asn Glu Lys His Asn
50 55 60

Ser Tyr Leu Asp Tyr Leu Glu Ser Ser Phe Val Arg Gln Leu Tyr Ser
65 70 75 80

Leu Leu Gly Gly Thr Gln Arg Leu Ser Arg Thr Arg Asp Val Gln
85 90 95

Ser Asn Ser His Lys Ser Ala Asp Gln Phe Thr Val Leu Gln Asn Gly
100 105 110

Cys Trp Gln Lys Val Asn Phe Gly Lys Lys Gln Ser Cys Leu Glu Thr
115 120 125

2003-08-18 2750-1573P.ST25.txt

Ser	Ser	Glu	Phe	Arg	Phe	His	Arg	Asn	Ser	Leu	Arg	Asn	Lys	Pro	Glu
130					135										140

Asn	Ser	Asn	Gly	Asn	Tyr	Thr	Met	Gly	Thr	Thr	Val	Gln	Gly	Asp	Val
145					150					155					160

Leu	Cys	His	Asp	Glu	Thr	Lys	His	Ser	Glu	Ala	Ser	Gly	Gln	Asn	Phe
					165				170						175

Arg	Glu	Glu	Glu	Glu	Glu	Lys	Gly	Glu	Val	Ser	Lys	Lys	Arg		
						180		185			190				

Glu	Arg	Glu	Ala	Asn	Asn	Asp	Asp	Ser	Ser	Leu	Lys	Glu	Asp	Gln	Val
						195		200			205				

Val	Pro	Val	Arg	Met	Val	Lys	Pro	Arg	Thr						
					210				215						

<210> 32
<211> 1027
<212> DNA
<213> *Arabidopsis thaliana*

<220>
<221> misc_feature
<222> (1)..(1027)
<223> *ceres* Seq. ID no. 12323601

<220>
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<222> ()..()
<223> n is a, c, t, g, unknown, or other

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agctctcggg aagaacgaga atgtatccga atcaacgagg ttcggtagcg gtagaaaacc 360
gtctcaagaa cagttcaagg ttcttcatga tggttctgg cagaagatta atgtgaaaca 420
acctgaacat cggattaacg gaaggcacgg tggtaattct catgagttc ttaggagtcc 480
atggattaaag cattataaac cttagtaaa gacacaaatc ccggtaacgg atgagcccga 540
aaatcaagtt gttagcagct ctaatggaa gaagggaaa tgcagctctg gctcagcctc 600
tagtctcaag cagctaaagct ctcattcgcg tgaccacgac caaatcagcg ttggagaagc 660
agaggatcg gatcagaact ttgttaacga aggaataaaa ggcgaaaacg gaagctcgaa 720
gaagatgaag acggtgatga tgagtgaatc gtcgagttacc gatcaggttg ttccactcaa 780
taagctcttg caacatgacg taaatttcaa gtctgtttct tgagaggtca gatggtaag 840

2003-08-18 2750-1573P.ST25.txt

ctttatatga ggagagaatt ttgtatgtatataatttgcataacttat aagtcaaatt	900
tactatcctt agttacaagt ttcttcatca tatacccta actataaata tatttatatg	960
ctcatgtgag tggattcatt tgtactgtaa aacccttaga aagacgtcaa attagtat	1020
gatggtc	1027

<210> 33
<211> 819
<212> DNA
<213> *Arabidopsis thaliana*

<400> 33	
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ttctccgacg actctgacga ttcttccgac gatgcttctt ccgtggagg agagaccact	180
tcttccatgt actctgcggg gaaagagtat atggaaacag aatggactaa tgagaagcat	240
agtttatatac tttaaatctat ggaagcttca ttcgtagatc agttatataa ctcgctcgga	300
gctctcgaaa agaacgagaa tgtatccgaa tcaacgaggt tcggtagcgg tagaaaaccg	360
tctcaagaac agttcaaggt tcttcatgat ggtttctggc agaagattaa tgtgaaacaa	420
cctgaacatc ggattaacgg aaggcacggg ggtaattctc atgagttct taggagtcca	480
tggattaagc attataaacc tttagtaaag acacaaatcc cggtAACCGA tgagcccggaa	540
aatcaagttg ttagcagctc taatggaaag aaggaaatat gcagctctgg ctcagcctct	600
agtctcaagc agctaagctc tcattcgcgt gaccacgacc aaatcagcgt tggagaagca	660
gaggtatcgg atcagaactt tgtaacgaa ggaataaaag gcgaaaacgg aagctcgaag	720
aagatgaaga cggtgatgat gagtgaatcg tcgagtaccg atcaggttgt tccactcaat	780
aagctcttgc aacatgacgt aaatttgaag tctgtttct	819

<210> 34
<211> 273
<212> PRT
<213> *Arabidopsis thaliana*

<220>
<221> peptide
<222> (1)..(273)
<223> ceres Seq. ID no. 12323602

<220>
<221> misc_feature
<222> ()..()
<223> xaa is any aa, unknown or other

<400> 34
Asp Ile Leu Phe Leu Ser Phe Ser Leu Ile Phe Phe Ile Phe Phe Phe
1 5 10 15

Phe Ser Leu Ser Leu His Lys Asp Lys Pro Thr Met Val Gly Asp Tyr
20

2003-08-18 2750-1573P.ST25.txt

20

25

30

Arg Gly Arg Phe Ser Ser Arg Arg Phe Ser Asp Asp Ser Asp Asp Ser
 35 40 45
 Ser Asp Asp Ala Ser Ser Val Glu Gly Glu Thr Thr Ser Ser Met Tyr
 50 55 60
 Ser Ala Gly Lys Glu Tyr Met Glu Thr Glu Trp Thr Asn Glu Lys His
 65 70 75 80
 Ser Leu Tyr Leu Lys Ser Met Glu Ala Ser Phe Val Asp Gln Leu Tyr
 85 90 95
 Asn Ser Leu Gly Ala Leu Gly Lys Asn Glu Asn Val Ser Glu Ser Thr
 100 105 110
 Arg Phe Gly Ser Gly Arg Lys Pro Ser Gln Glu Gln Phe Lys Val Leu
 115 120 125
 His Asp Gly Phe Trp Gln Lys Ile Asn Val Lys Gln Pro Glu His Arg
 130 135 140
 Ile Asn Gly Arg His Gly Gly Asn Ser His Glu Phe Leu Arg Ser Pro
 145 150 155 160
 Trp Ile Lys His Tyr Lys Pro Leu Val Lys Thr Gln Ile Pro Val Thr
 165 170 175
 Asp Glu Pro Glu Asn Gln Val Val Ser Ser Asn Gly Lys Lys Gly
 180 185 190
 Ile Cys Ser Ser Gly Ser Ala Ser Ser Leu Lys Gln Leu Ser Ser His
 195 200 205
 Ser Arg Asp His Asp Gln Ile Ser Val Gly Glu Ala Glu Val Ser Asp
 210 215 220
 Gln Asn Phe Val Asn Glu Gly Ile Lys Gly Glu Asn Gly Ser Ser Lys
 225 230 235 240
 Lys Met Lys Thr Val Met Met Ser Glu Ser Ser Ser Thr Asp Gln Val
 245 250 255
 Val Pro Leu Asn Lys Leu Leu Gln His Asp Val Asn Leu Lys Ser Val
 260 265 270

Ser

<210> 35
 <211> 738
 <212> DNA
 <213> *Arabidopsis thaliana*

<400> 35
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 aaagagtata tggaaacaga atggactaat gagaagcata gtttatatct taaatctatg 180
 gaagcttcat tcgttagatca gttatataac tcgctcggag ctctcgaaa gaacgagaat 240

2003-08-18 2750-1573P.ST25.txt

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cttcatgatg gtttctggca gaagattaat gtgaaacaac ctgaacatcg gattaacgga	360
aggcacggtg gtaattctca tgagttctt aggagtccat ggattaagca ttataaacct	420
ttagtaaaga cacaaatccc ggtAACGGAT gagCCGAAA atcaagttgt tagcagctct	480
aatgggaaga aggaaatatg cagctctggc tcagcctcta gtctcaagca gctaaagctct	540
cattcgcgtg accacgacca aatcagcgtt ggagaagcag aggtatcgga tcagaacttt	600
gttaacgaag gaataaaagg cgaaaacgga agctcgaaga agatgaagac ggtgatgatg	660
agtgaatcgt cgagtaccga tcaggttgtt ccactcaata agctttgca acatgacgta	720
aatttgaagt ctgtttct	738

<210> 36

<211> 246

<212> PRT

<213> *Arabidopsis thaliana*

<220>

<221> peptide

<222> (1)..(246)

<223> *ceres* Seq. ID no. 12323603

<220>

<221> misc_feature

<222> ()..()

<223> xaa is any aa, unknown or other

<400> 36

Met Val Gly Asp Tyr Arg Gly Arg Phe Ser Ser Arg Arg Phe Ser Asp			
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Asp Ser Asp Asp Ser Ser Asp Asp Ala Ser Ser Val Glu Gly Glu Thr			
20	25	30	

Thr Ser Ser Met Tyr Ser Ala Gly Lys Glu Tyr Met Glu Thr Glu Trp			
35	40	45	

Thr Asn Glu Lys His Ser Leu Tyr Leu Lys Ser Met Glu Ala Ser Phe			
50	55	60	

Val Asp Gln Leu Tyr Asn Ser Leu Gly Ala Leu Gly Lys Asn Glu Asn			
65	70	75	80

Val Ser Glu Ser Thr Arg Phe Gly Ser Gly Arg Lys Pro Ser Gln Glu			
85	90	95	

Gln Phe Lys Val Leu His Asp Gly Phe Trp Gln Lys Ile Asn Val Lys			
100	105	110	

Gln Pro Glu His Arg Ile Asn Gly Arg His Gly Gly Asn Ser His Glu			
115	120	125	

Phe Leu Arg Ser Pro Trp Ile Lys His Tyr Lys Pro Leu Val Lys Thr			
130	135	140	

Gln Ile Pro Val Thr Asp Glu Pro Glu Asn Gln Val Val Ser Ser Ser			
145	150	155	160

2003-08-18 2750-1573P.ST25.txt

<210> 37
<211> 633
<212> DNA
<213> *Arabidopsis thaliana*

<400> 37
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ggaaagaacg agaatgtatc cgaatcaacg aggttcggta gcggtagaaa accgtctcaa
gaacagttca aggttcttca tgatggtttc tggcagaaga ttaatgtgaa acaacctgaa
catcgattt acggaaggca cggtggtaat tctcatgagt ttcttaggag tccatggatt
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gttggtagca gctcta atgg gaagaaggga atatgcagct ctggctcagc ctctagtc
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aagacggtga tgatgagtga atcgtcgagt accgatcagg ttgttccact caataagctc
ttgcaacatg acgtt aattt gaagtctgtt tct
60
120
180
240
300
360
420
480
540
600
633

<210> 38
<211> 211
<212> PRT
<213> *Arabidopsis thaliana*

<220>
<221> peptide
<222> (1)..(211)
<223> ceres Seq. ID no. 12323604

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<220>
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<222> ()..()
<223> xaa is any aa, unknown or other
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2003-08-18 2750-1573P.ST25.txt

<400> 38
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 20 25 30
 Leu Tyr Asn Ser Leu Gly Ala Leu Gly Lys Asn Glu Asn Val Ser Glu
 35 40 45
 Ser Thr Arg Phe Gly Ser Gly Arg Lys Pro Ser Gln Glu Gln Phe Lys
 50 55 60
 Val Leu His Asp Gly Phe Trp Gln Lys Ile Asn Val Lys Gln Pro Glu
 65 70 75 80
 His Arg Ile Asn Gly Arg His Gly Gly Asn Ser His Glu Phe Leu Arg
 85 90 95
 Ser Pro Trp Ile Lys His Tyr Lys Pro Leu Val Lys Thr Gln Ile Pro
 100 105 110
 Val Thr Asp Glu Pro Glu Asn Gln Val Val Ser Ser Asn Gly Lys
 115 120 125
 Lys Gly Ile Cys Ser Ser Gly Ser Ala Ser Ser Leu Lys Gln Leu Ser
 130 135 140
 Ser His Ser Arg Asp His Asp Gln Ile Ser Val Gly Glu Ala Glu Val
 145 150 155 160
 Ser Asp Gln Asn Phe Val Asn Glu Gly Ile Lys Gly Glu Asn Gly Ser
 165 170 175
 Ser Lys Lys Met Lys Thr Val Met Met Ser Glu Ser Ser Thr Asp
 180 185 190
 Gln Val Val Pro Leu Asn Lys Leu Leu Gln His Asp Val Asn Leu Lys
 195 200 205
 Ser Val Ser
 210

<210> 39
<211> 960
<212> DNA
<213> *Arabidopsis thaliana*

<220>
<221> misc_feature
<222> (1)..(960)
<223> *ceres* Seq. ID no. 13491409

<220>
<221> misc_feature
<222> ()..()
<223> n is a, c, t, g, unknown, or other

<400> 39
atttttgttt ctctctttct ctctgatatt tttcattttc ttctttttct ctctctctct 60

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ccacaaagat aagccaaacaa	tggttggtga ttacagagga	cgcttagta gccgtcgaaa	120
ctccgatgac tctgacgatt	cttccgacga tgcttctcc	gtggagggag agaccacttc	180
ttccatgtac tctgcgggaa	aagagtataat ggaaacagaa	tggactaatg agaagcatag	240
tttatatctt aaatctatgg	aagcttcatt cgtagatcag	ttatataact cgctcggagc	300
tctcgggaag aacgagaatg	tatccgaatc aacgaggttc	ggtagcggta gaaaaccgtc	360
tcaagaacag ttcaagggttc	ttcatgatgg tttctggcag	aagattaatg tgaaacaacc	420
tgaacatcg attaacggaa	ggcacggtg taattctcat	gagtttctta ggagtccatg	480
gattaagcat tataaacctt	tagtaaagac acaaatccc	gtaacggatg agcccgaaaa	540
tcaagttgtt agcagctcta	atgggaagaa gggatatgc	agctctggct cagcctctag	600
tctcaagcag ctaagctctc	attcgcgtga ccacgaccaa	atcagcgttg gagaagcaga	660
ggtatcggat cagaacctt	ttaacgaagg aataaaaggc	gaaaacggaa gctcgaaagaa	720
gatgaagacg gtgatgatga	gtgaatcgatc gagtaccat	caggttgttc cactcaataa	780
actcttgcaa catgacgtaa	atttgaagtc tgtttcttga	gaggtcagat ggtgaagctt	840
tatatgagga gagaatttt	taatgtataat atattgcata	aacttataag tcaaattttac	900
tatcccttagt tacaaggttc	ttcatcatat atccctaact	ataaaatataat ttatatgcc	960
			960

<210> 40
<211> 816
<212> DNA
<213> *Arabidopsis thaliana*

<400> 40			
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cacaaagata agccaacaat	ggttggtgat tacagaggac	gcttttagtag ccgtcgaaa	120
tccgatgact ctgacgattc	ttccgacgat gcttctccg	tggagggaga gaccacttct	180
tccatgtact ctgcgggaa	agagtataatg gaaacagaat	ggactaatga gaagcatagt	240
ttatatctt aatctatgg	agcttcattc gtatcgtat	tatataactc gctcggagct	300
ctcgggaaga acgagaatgt	atccgaatca acgaggttcg	gtagcggtag aaaaccgtct	360
caagaacagt tcaagggtct	tcatgatggt ttctggcaga	agattaatgt gaaacaacct	420
gaacatcgg	ttaacggaa gcacggtgtt	aattctcatg agtttcttag gagtccatgg	480
attaaggcatt ataaaccttt	agtaaagaca caaatcccgg	taacggatga gcccggaaaat	540
caagttgtta gcagctctaa	tgggaagaag ggaatatgca	gctctggctc agcctctagt	600
ctcaaggcagc taagctctca	ttcgcgtgac cacgaccaa	tcagcgttgg agaagcagag	660
gtatcggatc agaactttgt	taacgaagga ataaaaggcg	aaaacggaaag ctcgaagaag	720
atgaagacgg ttagttagat	tgaatcgatc agtaccgatc	agttgttcc actcaataaa	780

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ctcttgcaac atgacgtaaa tttgaagtct gtttct

816

<210> 41
<211> 272
<212> PRt
<213> *Arabidopsis thaliana*

<220>
<221> peptide
<222> (1)..(272)
<223> *ceres* Seq. ID no. 13491410

<220>
<221> misc_feature
<222> ()..()
<223> xaa is any aa, unknown or other

<400> 41
Phe Leu Phe Leu Ser Phe Ser Leu Ile Phe Phe Ile Phe Phe Phe Phe
1 5 10 15
Ser Leu Ser Leu His Lys Asp Lys Pro Thr Met Val Gly Asp Tyr Arg
20 25 30
Gly Arg Phe Ser Ser Arg Arg Phe Ser Asp Asp Ser Asp Asp Ser Ser
35 40 45
Asp Asp Ala Ser Ser Val Glu Gly Glu Thr Thr Ser Ser Met Tyr Ser
50 55 60
Ala Gly Lys Glu Tyr Met Glu Thr Glu Trp Thr Asn Glu Lys His Ser
65 70 75 80
Leu Tyr Leu Lys Ser Met Glu Ala Ser Phe Val Asp Gln Leu Tyr Asn
85 90 95
Ser Leu Gly Ala Leu Gly Lys Asn Glu Asn Val Ser Glu Ser Thr Arg
100 105 110
Phe Gly Ser Gly Arg Lys Pro Ser Gln Glu Gln Phe Lys Val Leu His
115 120 125
Asp Gly Phe Trp Gln Lys Ile Asn Val Lys Gln Pro Glu His Arg Ile
130 135 140
Asn Gly Arg His Gly Gly Asn Ser His Glu Phe Leu Arg Ser Pro Trp
145 150 155 160
Ile Lys His Tyr Lys Pro Leu Val Lys Thr Gln Ile Pro Val Thr Asp
165 170 175
Glu Pro Glu Asn Gln Val Val Ser Ser Ser Asn Gly Lys Lys Gly Ile
180 185 190
Cys Ser Ser Gly Ser Ala Ser Ser Leu Lys Gln Leu Ser Ser His Ser
195 200 205
Arg Asp His Asp Gln Ile Ser Val Gly Glu Ala Glu Val Ser Asp Gln
210 215 220

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Asn	Phe	Val	Asn	Glu	Gly	Ile	Lys	Gly	Glu	Asn	Gly	Ser	Ser	Lys	Lys
225				230					235					240	

Met	Lys	Thr	Val	Met	Met	Ser	Glu	Ser	Ser	Ser	Thr	Asp	Gln	Val	Val
	245						250						255		

Pro	Leu	Asn	Lys	Leu	Leu	Gln	His	Asp	Val	Asn	Leu	Lys	Ser	Val	Ser
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<211> 738
<212> DNA
<213> Arabidopsis thaliana

<400> 42
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tcttccgacg atgcttccttc cgtggaggaa gagaccactt cttccatgtt ctctgcgggg 120
aaagagtata tggaaacaga atggactaat gagaagcata gtttatatct taaatctatg 180
gaagcttcat tcgttagatca gttatataac tcgctcggag ctctcgggaa gaacgagaat 240
gtatccgaat caacgagggtt cggtagcgggt agaaaaccgt ctcaagaaca gttcaagggtt 300
cttcatgtatg gtttctggca gaagattaat gtgaaacaac ctgaacatcg gattaacggaa 360
aggcacgggtg gtaattctca tgtagttctt aggagtccat ggattaagca ttataaacct 420
ttagtaaaga cacaatccc ggttaacggat gagcccggaa atcaagttgt tagcagctct 480
aatggaaaga agggaatatg cagctctggc tcagcctcta gtctcaagca gctaaagctct 540
cattcgcgtg accacgacca aatcagcggtt ggagaagcag aggtatcgga tcagaacttt 600
gttaacgaag gaataaaagg cgaaaacggaa agctcgaaga agatgaagac ggtgatgatg 660
agtgaatcggt cgagtaccga tcaggttggtt ccactcaata aactcttgca acatgacgta 720
aatttgaagt ctgtttct 738

<210> 43
<211> 246
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> peptide
<222> (1)..(246)
<223> ceres Seq. ID no. 13491411

<220>
<221> misc_feature
<222> ()..()
<223> xaa is any aa, unknown or other

<400> 43
Met Val Gly Asp Tyr Arg Gly Arg Phe Ser Ser Arg Arg Phe Ser Asp
1 5 10 15

Asp Ser Asp Asp Ser Ser Asp Asp Ala Ser Ser Val Glu Gly Glu Thr
27

20

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25
30

Thr Ser Ser Met Tyr Ser Ala Gly Lys Glu Tyr Met Glu Thr Glu Trp
 35 40 45

Thr Asn Glu Lys His Ser Leu Tyr Leu Lys Ser Met Glu Ala Ser Phe
 50 55 60

Val Asp Gln Leu Tyr Asn Ser Leu Gly Ala Leu Gly Lys Asn Glu Asn
 65 70 75 80

Val Ser Glu Ser Thr Arg Phe Gly Ser Gly Arg Lys Pro Ser Gln Glu
 85 90 95

Gln Phe Lys Val Leu His Asp Gly Phe Trp Gln Lys Ile Asn Val Lys
 100 105 110

Gln Pro Glu His Arg Ile Asn Gly Arg His Gly Gly Asn Ser His Glu
 115 120 125

Phe Leu Arg Ser Pro Trp Ile Lys His Tyr Lys Pro Leu Val Lys Thr
 130 135 140

Gln Ile Pro Val Thr Asp Glu Pro Glu Asn Gln Val Val Ser Ser Ser
 145 150 155 160

Asn Gly Lys Lys Gly Ile Cys Ser Ser Gly Ser Ala Ser Ser Leu Lys
 165 170 175

Gln Leu Ser Ser His Ser Arg Asp His Asp Gln Ile Ser Val Gly Glu
 180 185 190

Ala Glu Val Ser Asp Gln Asn Phe Val Asn Glu Gly Ile Lys Gly Glu
 195 200 205

Asn Gly Ser Ser Lys Lys Met Lys Thr Val Met Met Ser Glu Ser Ser
 210 215 220

Ser Thr Asp Gln Val Val Pro Leu Asn Lys Leu Leu Gln His Asp Val
 225 230 235 240

Asn Leu Lys Ser Val Ser
 245

<210> 44

<211> 633

<212> DNA

<213> Arabidopsis thaliana

<400> 44

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gggaagaacg agaatgtatc cgaatcaacg aggttcggta gcggtagaaa accgtctcaa	180
gaacagttca aggttcttca tgatggtttc tggcagaaga ttaatgtgaa acaacctgaa	240
catcgatttta acggaaggca cggtggtaat tctcatgagt ttcttaggag tccatggatt	300
aagcattata aaccttttgt aaagacacaa atccccgtaa cggatgagcc cgaaaatcaa	360
gttggtagca gctctaattgg gaagaaggga atatgcagct ctggctcagc ctctagtc	420

2003-08-18 2750-1573P.ST25.txt

aaggcagctaa gctctcattc gcgtgaccac gaccaaatac	gcgttggaga agcagaggt	480	
tccggatcaga actttgttaa cgaaggaaa aaaggcgaaa acggaagctc	gaagaagatg	540	
aagacggtga tcatgagtga atcgtcgagt accgatcagg ttgttccact caataaactc		600	
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<210> 45			
<211> 211			
<212> PRT			
<213> <i>Arabidopsis thaliana</i>			
<220>			
<221> peptide			
<222> (1)..(211)			
<223> <i>ceres</i> Seq. ID no. 13491412			
<220>			
<221> misc_feature			
<222> ()..()			
<223> xaa is any aa, unknown or other			
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20	25	30	
Leu Tyr Asn Ser Leu Gly Ala Leu Gly Lys Asn Glu Asn Val Ser Glu			
35	40	45	
Ser Thr Arg Phe Gly Ser Gly Arg Lys Pro Ser Gln Glu Gln Phe Lys			
50	55	60	
Val Leu His Asp Gly Phe Trp Gln Lys Ile Asn Val Lys Gln Pro Glu			
65	70	75	80
His Arg Ile Asn Gly Arg His Gly Asn Ser His Glu Phe Leu Arg			
85	90	95	
Ser Pro Trp Ile Lys His Tyr Lys Pro Leu Val Lys Thr Gln Ile Pro			
100	105	110	
Val Thr Asp Glu Pro Glu Asn Gln Val Val Ser Ser Asn Gly Lys			
115	120	125	
Lys Gly Ile Cys Ser Ser Gly Ser Ala Ser Ser Leu Lys Gln Leu Ser			
130	135	140	
Ser His Ser Arg Asp His Asp Gln Ile Ser Val Gly Glu Ala Glu Val			
145	150	155	160
Ser Asp Gln Asn Phe Val Asn Glu Gly Ile Lys Gly Glu Asn Gly Ser			
165	170	175	
Ser Lys Lys Met Lys Thr Val Met Met Ser Glu Ser Ser Ser Thr Asp			
180	185	190	
Gln Val Val Pro Leu Asn Lys Leu Leu Gln His Asp Val Asn Leu Lys			
195	200	205	

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Ser Val Ser
210

<210> 46
<211> 1031
<212> DNA
<213> Artificial Sequence

<220>
<223> clone nucleotide 486033

<220>
<221> misc_feature
<222> (609)..(609)
<223> n is a, c, g, or t

<400> 46		
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cgcacatctcta attcatcttc gtcgagagga gctgtccctc ttctttgccg cctcgaatct	180	
gggactggtc ggttttctgg atccctgctg cctgtcgggt tctcgagagg tgtaaaatcc	240	
aatggagggt gtgtcatcgat tgaaccagcc gttgatcaac gacgaccggc agcccggtcc	300	
cagcagtatc gccaagggtg atcaaatcca aggccctgttg tcgggtgaat ggacaaatga	360	
gcggcacacgc tcgtacataa gctccatgga ggcacatcttc gtggagcaac tccgttagtgg	420	
ttccaaggcc atccaggagg gcttgcacca gagcatgagg attccgaggg atgatgctcg	480	
cagccatgac gtccctgaga gtccgtgggt ggtgggtgagg cgtttcaggg cacgcgggt	540	
ccaccatggc gatggaatgg aagtggAACCC tttgggtcgat ggttatggat caggtactga	600	
cacggcccng agagaagggtc cggacccacg caagatagcg aaggcttctg ctattattga	660	
agtcacggac cagaattttc ctgaggagg gattcaatcc agtaacgggt catgcaagag	720	
acagaaatct actcctggca atgcatcaaa tggccagggt acttaacaag atagtggaaag	780	
ccaagccatg ccctctctga agccttcagg agggccatggg gggaaacgaga cttgtctgca	840	
gtactacgtg atgacagggtc gtgctgcagc tgcaagtagt ttggcttacc aaaatatgat	900	
atcgtcgatcc tttctgcgggt gtggagagta gaatatgcat atccacatct gcagagagca	960	
ccgggttctct tcttcttgcgtt gctgttacta ttttgcacca tggagcaaat ttatggta	1020	
aatttgagct g	1031	

<210> 47
<211> 174
<212> PRt
<213> Artificial Sequence

2003-08-18 2750-1573P.ST25.txt

<220>

<223> clone peptide 486033

<220>

<221> misc_feature

<222> (123)..(123)

<223> Xaa can be any naturally occurring amino acid

<400> 47

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Gln Pro Val Pro Ser Ser Ile Ala Lys Gly Asp Gln Ile Gln Gly Leu
20 25 30

Leu Ser Gly Glu Trp Thr Asn Glu Arg His Ser Ser Tyr Ile Ser Ser
35 40 45

Met Glu Ala Ser Phe Val Glu Gln Leu Arg Ser Gly Ser Lys Ala Ile
50 55 60

Gln Glu Gly Leu Cys Gln Ser Met Arg Ile Pro Arg Asp Asp Ala Arg
65 70 75 80

Ser His Asp Val Pro Glu Ser Pro Trp Val Val Val Arg Arg Phe Arg
85 90 95

Pro Arg Gly Val His His Gly Asp Gly Met Glu Val Glu Pro Leu Val
100 105 110

Asp Gly Tyr Gly Ser Gly Thr Asp Thr Ala Xaa Arg Glu Gly Pro Asp
115 120 125

Pro Arg Lys Ile Ala Lys Ala Ser Ala Ile Ile Glu Val Thr Asp Gln
130 135 140

Asn Phe Pro Glu Glu Gly Ile Gln Ser Ser Asn Gly Ala Cys Lys Arg
145 150 155 160

Gln Lys Ser Thr Pro Gly Asn Ala Ser Asn Gly Gln Gly Thr
165 170